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Food as Medicine

CIA and CAS In Focus Seminar

October 28, 2016

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 Ken Beckman
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Note: The information presented is based on research and personal experience, and does not constitute medical advice.

Workshop Agenda

- How can Food be our Medicine? - Caterina
- Personal Stories - Caterina, Ken
- Obesity - Ken
- Heart Disease - Caterina
- Cancer - Ken
- Diabetes - Caterina
- Insurance Aspects - Ken
- Small group work - All

"THE FOOD YOU EAT
CAN BE EITHER
THE SAFEST
&
MOST POWERFUL
FORM OF MEDICINE
or
THE SLOWEST
FORM OF POISON."

Ann Wigmore

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Whole-foods, Plant-based Diet

If it came from a plant,
eat it.


If it was made in a plant,
don't.



<https://www.youtube.com/watch?v=wmp5Nm24aw>

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Plant based, whole foods



GRAINS & STARCHY VEGETABLES 5+ SERVINGS

FRUIT 2+ SERVINGS

SEEDS & NUTS 1-2 SERVINGS

VEGETABLES 4+ SERVINGS

BEANS & LENTILS 3+ SERVINGS

www.humanefacts.org

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Our Personal Stories



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Obesity

Cause: consuming more calories than are burned

Only Three Possible Solutions:

- (1) Eat less of the same foods
- (2) Exercise more

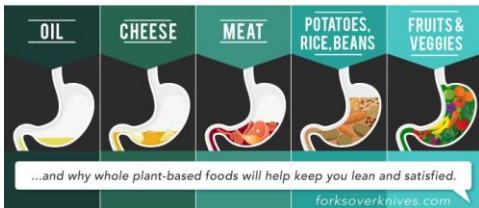
	Hours Needed to Burn Calories by ¹ :	
	Walking	Jogging
Double Cheeseburger	3.0	1.0
2 slices Pepperoni Pizza	2.5	1.0
8 oz Potato Chips	5.0	1.75
1 cup Chocolate Ice Cream	2.0	.75

- (3) Eat the same or more of certain foods

¹ <http://www.mynetdiary.com/burn-off-that-cheeseburger.html>

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CALORIE DENSITY WHAT 500 CALORIES LOOK LIKE



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Controlled Study of Overweight Women¹

Weight Loss After:	Plant-Based Diet (PBD)	Cholesterol Education Diet (included animal products)
1 year	4.9 kg	1.8 kg
2 years	3.1 kg	0.8 kg

- No restrictions on calories
- For 14 weeks all met with physician/dietician
- PBD group -- consumed fewer calories than before study
- PBD group -- not aware they were eating fewer calories – greater volume of food compared to Cholesterol Education group

¹Gabrielle M. Turner-McGrievy et al., "A Two-Year Randomized Weight Loss Trial Comparing a Vegan Diet to a More Moderate Low-Fat Diet," *Obesity* 15 (September 2007).
 Neal Barnard, *21-Day Weight Loss Kickstart: Boost Metabolism, Lower Cholesterol and Dramatically Improve Your Health*. (New York: Grand Central Life & Style, 2011), 24.

Studies of BMI by Diet Type

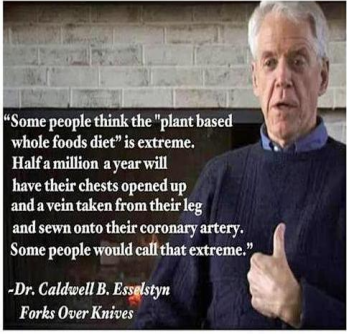
Diet Type	Body Mass Index (BMI)	
	UK Study of 38,000 ¹ (controlled for age/lifestyle)	US Study of 60,000 ² (not controlled for age/lifestyle)
Non-vegetarians	24.4	28.8
Vegetarians	23.4	25.7
Vegans	22.5	23.6

- BMI >25 is overweight, BMI>30 is obese
- Many vegans do not follow a whole food plant-based diet. Those who do would expect to have a lower BMI than shown.

¹EA Spencer et al., "Diet and body mass index in 38,000 EPIC-Oxford meat-eaters, fish-eaters, vegetarians and vegans," *International Journal of Obesity* 27 (2003).
²Serena Tonstad et al., "Type of Vegetarian Diet, Body Weight, and Prevalence of Type 2 Diabetes," *Diabetes Care* 32, (May 2009), 1

Whole Food Plant-Based Diet and Obesity

- Weight loss can and does occur by eating the same or even greater volume of food
- Does not require extreme exercise to burn off calories
- Avoids feelings of deprivation or starvation—if you are hungry just eat
- Focus is on the types of food rather than limits on the amount of food



“Some people think the “plant based whole foods diet” is extreme. Half a million a year will have their chests opened up and a vein taken from their leg and sewn onto their coronary artery. Some people would call that extreme.”

-Dr. Caldwell B. Esselstyn
Forks Over Knives

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Cancer

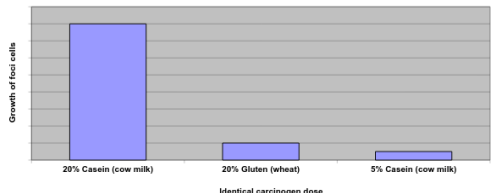
World Health Organization (WHO) in 2015¹:

- processed meat "*carcinogenic to humans*" - same classification as tobacco smoke and asbestos
- red meat "*probably carcinogenic to humans*"

¹http://www.iarc.fr/en/media-centre/pr/2015/pdf/pr240_E.pdf
<http://www.who.int/features/qa/cancer-red-meat/en/>

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Laboratory Animal Research – T. Colin Campbell¹



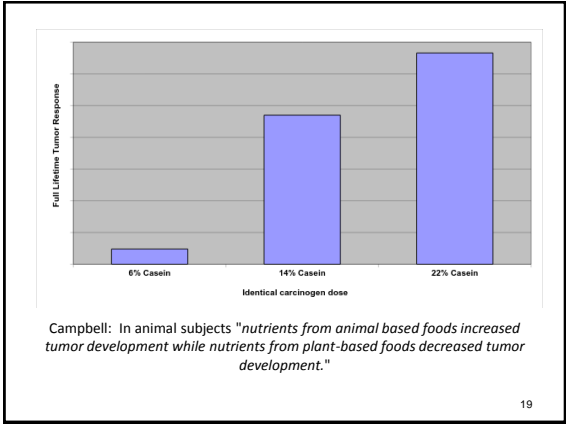
Protein Source	Growth of foci cells
20% Casein (cow milk)	High
20% Gluten (wheat)	Low
5% Casein (cow milk)	Very Low

Identical carcinogen dose

- Able to turn on/off cancer by varying amounts of animal protein
- Foci cells initially determined by carcinogen exposure but controlled by dietary protein
- Initiation stage of cancer less important than promotion stage

¹ T. Colin Campbell and Thomas M. Campbell, *The China Study: The Most Comprehensive Study of Nutrition Ever Conducted and the Startling Implications for Diet, Weight Loss and Long-term Health*, (Dallas: Benbella Books, Inc., 2004).

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China Study (1980s) – Campbell & Chen

- 6,500 adult subjects across non-urban China
- Cancer rates varied widely among areas in China
- "Animal protein intake was convincingly associated in the China study with the prevalence of cancer in families."
- U.S. had 5x breast cancer rates of rural China

	China study (least active)	U.S. average
Calories (kcal/kg)	40.6	30.6
BMI	20	25
Protein (g)	64	91
Animal protein (% of total cal.)	0.8%	10%

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Recent data – Deaths per 100,000 (WHO-2012)¹

Type of Cancer	North America	Asia
Breast	14.8	10.0
Prostate	9.8	3.5

¹<http://publications.iarc.fr/Non-Series-Publications/World-Cancer-Reports/World-Cancer-Report-2014>

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Whole Food Plant-Based Diet:
A Disruptor of the Health Care/Health Insurance Industry

Fee-for-Service:

Health care providers/facilities receive payment for their services based on number and complexity of procedures performed regardless of health outcomes

Resulting in...

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Non Sequitur by Wiley Miller¹



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November 19, 2014 from www.gocomics.com

¹ <http://www.gocomics.com/nonsequitur/2014/11/19>

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Insurers (Private Companies and Government Plans):
transfer rising costs of care in the form of higher premiums and taxes

Dr. Dean Ornish observed in his work¹:

- There was no "shortage of motivated patients" that were receptive to lifestyle changes as an alternative to drugs or surgery
- "The primary limiting factor has been the lack of widespread insurance coverage."
- "No matter how good a program is clinically, if it's not reimbursable, it's not sustainable."

Resulting in...

¹ Amy Lynn Sorrel, "Medicare's new approach to familiar diseases," *American Medical News*, (May 14, 2012), <http://www.amednews.com/article/20120514/government/305149956/4/>

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T. Colin Campbell¹:

"should not be ignoring ideas just because we perceive that the public does not want to hear them. Consumers have the ultimate choice of whether to integrate our findings into their lifestyles, but we owe it to them to give them the best information possible with which to make that decision and not decide for them."

¹T. Colin Campbell and Thomas M. Campbell, *The China Study: The Most Comprehensive Study of Nutrition Ever Conducted and the Startling Implications for Diet, Weight Loss and Long-term Health*, (Dallas: BenBella Books, Inc., 2004), 287.

Discussion Group Format

1. Watch a [video](#) about Alzheimer's Disease.
2. Take 5 minutes alone to answer the questions.
3. Appoint a facilitator, scribe and spokesperson.
4. Discuss for 15 minutes, including about 2-3 minutes to summarize. You don't need to discuss all the questions.
5. Spokesperson reports back to the main group. 1 minute for each group.

Discussion Questions

1. Are you surprised you have not heard this information before? Do you believe this information?
2. Would you have concerns about you and your family adopting this diet?
3. Are there legitimate reasons not to have physicians and insurers recommend this approach to all their patients/insureds?
4. Barriers for individuals/physicians adopting.
5. Ways for insurance organizations to promote among insureds
6. Do you believe this can be adopted on a widespread basis?

Find Plant-based Diet resources at:

[http://www.cuthealthcarecosts.org/
plantbaseddietresources.html](http://www.cuthealthcarecosts.org/plantbaseddietresources.html)

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